

Preventing Erosion

Tile Drainage, Surface Ditching and Proper Turning Under of Furrow Will Aid

By C. E. LeClair, Instructor in Agronomy, College of Agriculture, University of Missouri

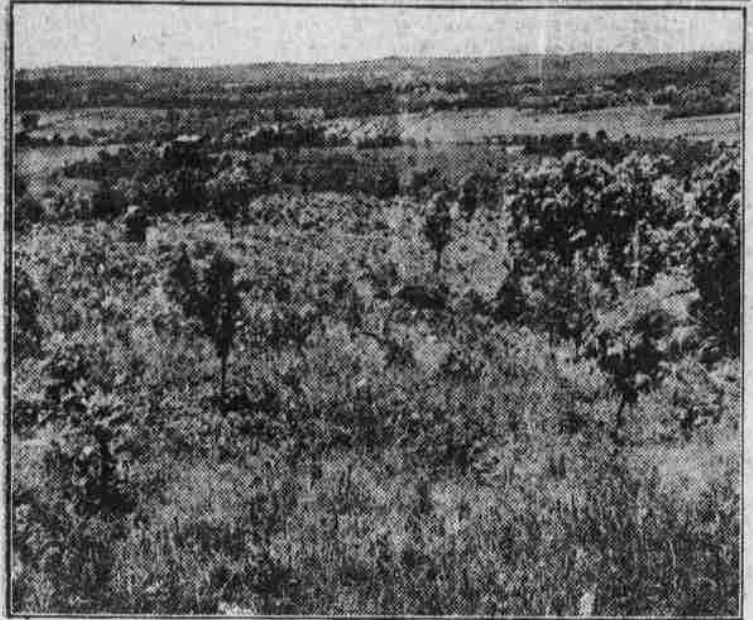
In the gently rolling to severely broken country of Missouri, heavy rains are bound to remove some of the best of the soil, leaving the heavier, sandier material which is always poorer in quality. This process of washing away the finer, rich soil ingredients is called erosion. All soils are composed of clay, silt and sand particles mixed with organic matter. Clay and silt are both easily removed by the washing of the rains. Unfortunately, these two soil constituents contain the bulk of the essential plant foods, phosphorus, potassium and nitrogen.

The cultivation of soil by man is an unnatural condition. Nature protects rolling or hilly land by a mat of grass with a network of fine rootlets which

turned under there is little wash as compared with the following years. Soil kept rich in organic matter resists the ravages of surface water.

In preparing hillside for corn, the plowing should always be done parallel with the contour of the hill. As plowing is done in the fall, the land should be left in the rough over winter. Dead furrows should be placed so that they lead to a sodden strip or ravine at the end of the field, thus they will be effective drains and deep cutting during the spring torrents will be prevented.

When corn is checked, the first cultivation should be up the hill, so that later plowings will have furrows permitting drainage with the contour. On the more gently rolling land, where



Typical Missouri Topography Showing Nature's Way of Preventing Erosion.

enmesh the soil particles. Often the steepest slopes support timber growth, the dead leaves of which provide a blanket of spongy material which has the ability to drink in a great deal of water.

It is perfectly practical to cultivate rolling lands and maintain a reserve fund of fertility if the ways of nature are imitated as far as possible. Steep hillside should be kept in a permanent pasture. Very broken land should be kept in grass whenever feasible. As a rule, even in the roughest country, there are few farms which do not have considerable level strips. These flats should be utilized for the filled crops. At the same time the hillside may be put in corn once in four years, as the first year after the sod has been

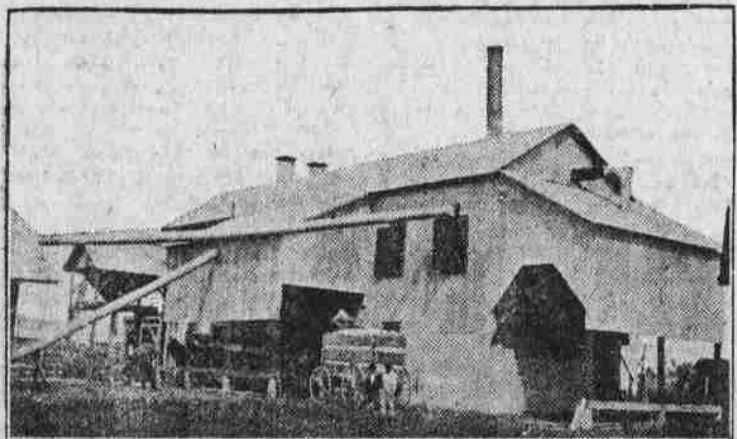
plowing must be practiced more frequently, it is often advisable to have a cover crop, such as rye, on the land over winter.

New land does not wash as does the older cultivated soil, because the organic matter binds the mineral grains together. Retaining the organic content of soil indirectly prevents erosion. Where little precaution is taken in this regard it has been estimated that the loss to the soil by erosion is as much as one-tenth of an inch of surface soil in four years. This means a great loss of plant food.

By diligent practice of these suggestions the reserve fund of fertility will be kept permanent and the uniformity of the field will make farming operations less difficult to handle.

Cotton Growing in Missouri

By A. R. Evans, Assistant in Agronomy, College of Agriculture, University of Missouri



Cotton Gin in Missouri.

One of the richest sections in the cotton belt is found in the sandy loam Mississippi bottoms of southeast Missouri. In 1911 the production reached about 100,000 bales of cotton, with an approximate value of \$5,000,000 to \$6,000,000. There are 100 gins to handle the crop and four large oil mills to crush the seed. The seed in 1911 amounted to 42,000 tons, yielding 1,500,000 gallons of oil and over 20,000 tons of cottonseed cake.

The reports of the United States department of agriculture show that we should have a total production of 70,000 bales for 1913. This production could be greatly increased by more selective methods of farming and seed selection. This same report shows the average yield an acre for the United States for 1913 was 182 pounds, while the average yield in

Missouri for last year was 286 pounds of lint cotton an acre. Although very few people are trying to improve the cotton crop, our natural advantages are such that we produced higher yields than any other state, with the exception of California, where the most improved methods are used. The production there last year was a bale to the acre.

Each locality should grow one kind of cotton and the farmers should cooperate in the marketing of their crop.

With proper farming practices, cotton is probably the least exhaustive of any of our farm crops. Dugger estimates that where only the lime is removed from the land only 42 cents' worth of fertility is lost when a bale of cotton is sold. The seed is very rich in nitrogen. After the oil is expelled the cottonseed cake should be fed on the farm or used as fertilizer.

Cultivating Corn.

Usually the cultivation of corn should begin by harrowing lightly before the corn comes up, or at least once or twice before the corn is large enough to cultivate with a cultivator. This is an especially good practice if planting has been followed by a rain that has packed the soil and caused a crust to form on top through which the plants cannot break. Early harrowing will also conserve moisture by stirring the top soil, kill the weeds and grasses which have started, and throw out more seed to sprout and be killed by later cultivation. An ordinary spike-tooth harrow or weeder is best adapted to this work.

If conditions will permit, it is well to harrow once before the corn is up and again before it is large enough to cultivate in the ordinary way. When the corn is large enough to cultivate, it should be plowed fairly deep and close to the first plowing, so as to kill all grass and weeds that may have escaped the harrow. Get the field cleaned out as early as possible, for it is more easily done than later.

Size of Silo to Build.

The size of the silo to build depends upon the number of animals to be fed. As a rule, the mistake is made of building the silo too large in diameter rather than too small. The silo should be small enough so that the animals will consume a quantity each day equal to a layer of at least two inches over the entire surface. Silage keeps better in a deep silo than in a shallow one, because it is more firmly packed and at the same time more feed can be stored in the same space.

Except with a very large herd it is not advisable to build a silo more than 16 feet in diameter. If more capacity is needed a second silo should be constructed. As a rule the height of the silo should be at least twice the diameter.

After the silo is opened silage should be taken out regularly. Otherwise that which is exposed to the air at the surface will spoil within two or three days. The amount of silage ordinarily fed to a dairy cow or to a fattening steer of the same size is from 30 to 40 pounds a day.

CITY OF MEXICO PLACE OF TERROR

Medill McCormick Tells Perils Met in Huerta's Capital.

AMERICANS KEPT IN PRISON

Correspondents Are Arrested and Insulted—Trade Is at a Standstill and All Feel Dictator's Government Is Doomed.

By MEDILL MCCORMICK, Special Correspondent in Mexico of the Chicago Daily News.

Vera Cruz, Mexico, May 12.—Americans are in prison in Mexico City, held incommunicado in places unknown to the Brazilian legation. I do not know how many are held by the police. When I left Mexico City on a French special train for Puerto Mexico, Walter Whiffen of the Associated Press was under arrest for the second time within 24 hours. Mr. Doster of the International News service was in jail, and so was Mr. Sutton of the Washington Post. An American named Schuler and a locomotive engineer who had returned from Cuba looking for his family were also in prison.

Luis d'Antin, interpreter for the American embassy, dares not leave the precincts of the Brazilian legation, while his wife is afraid to leave the house in which she is hiding. The Mexicans would have taken d'Antin, but for the intervention of the representatives of Argentina, Brazil and Chile, the mediating powers.

Americans Are Not Safe.

The City of Mexico is inarticulate, dazed, afraid. Americans are not safe there and they ought to leave. Other foreigners are alarmed. Mexicans do not speak aloud the names of conspicuous men or of strategically important places. There are Mexican spies everywhere and everywhere they are looking for American spies. The Mexican authorities hold that war exists, but that there is an armistice of virtue of the mediation of the "A. B. C." powers. Yet no American is permitted to send a cable message or telegram. I had to get a foreign friend to inform my family and the Daily News of my release a second time and he doubted whether the message had passed the censor.

Press messages by correspondents who are not Americans are censored so that they are valueless. Although Americans are not safe and are forbidden to cable home, they cannot go to the British or German legation for protection. There may be reasons of high diplomacy why Brazil should represent our interests in Mexico, but it is a fact that although he does his best, Senor Cardoso de Oliveira is unable sufficiently to protect our fellow citizens in Mexico City if there be rioting. Even if there is none I am afraid we shall be sorry that the care of American interests was taken out of the hands of Sir Lionel Carden, the British minister.

Suspicion and Menace in Air.

When Richard Harding Davis and I reached Mexico City after our trip from Vera Cruz we went about looking for lodging and food. Suspicion and menace were in the air. Rurales and police with firearms patrolled the streets, which by day were almost as bare of life as by night. Every automobile bore the flag of its owner. Many flags hung from the windows for the protection of the houses and gave the city a sardonic look, like that of a horrid old woman dying with a painted face and decked with finery.

Saturday morning I set about my mission to see certain well-informed foreigners and Mexicans, to bring out of the city the news of conditions which the censor refuses to pass and which, indeed, it would be dangerous for a resident to go about collecting. I saw important members of the French, German and English colonies, as well as Americans. I have reason to believe that no correspondent for weeks has been able to receive such important expressions of opinion.

Huerta Government Doomed.

The Huerta government cannot advance against General Villa, starved as it is for revenue and ammunition, and presently it must fall. How long it can resist Villa's advance is problematical. There is now talk of General Huerta's overthrow by local revolution and of his assassination. I saw him out automobiling. Many people think that he wishes to provoke intervention and that he sent General Navarro to ward Vera Cruz for that purpose.

Trade is at a standstill. No freight is moving on the railroads and oil fuel is becoming so scarce that the number of passenger trains has been radically reduced. Control of the Mexican railway has been taken by the government from its English owners. People fear a sacking of the city by the victorious Villa forces or its looting by the mob if General Huerta is killed or overthrown by a local revolution.

They Advocate Intervention. Thus it happens that some Mexicans and nearly all foreigners now advocate intervention. Everywhere, I asked two questions:

First—"If General Huerta resign and the Carranzistas consent to a compromise, are there enough elements out of which a reasonably representative government can be constituted?"

"Yes," was the answer most frequently given, "if they and the mediating

Effect of Wireless on Birds.

Observations made in sections of the world where there are many wireless stations indicate that birds are disturbed in a singular way by the wireless waves. It is stated that gulls are apparently the principal sufferers, but that also large numbers of doves are in some way prevented from finding their way home when there are wireless stations in the line of flight. This strange phenomenon is attributed to some effect of the ether waves not yet understood.

powers give to the United States their moral authorization to intervene. If the Huertistas and Carranzistas refuse to compromise their differences, no."

Second—"Is a single presidential autocrat necessary to the preservation of order in Mexico?"

"No, if a compromise government is assured of American military support in the event of further revolution."

Pessimism Is General.

But none of those with whom I talked was sanguine. All considered compromise possible rather than probable. I shared their pessimism as I went past the battered American club to the beleaguered and worried little Brazilian minister. What hope is there for a people whose government builds an opera house more beautiful than any such building in the British empire or the United States, while the majority of the people have neither letters in their heads nor shoes on their feet?

Henry Rice, who used to live in Chicago, took me to the general of police. We drove past cabmen who looked and dressed like blanket Indians and past officers as smartly uniformed as the French artillery staff. The general gave us permission to leave the city. We hurried past the boulevard Y. M. C. A. building to the French special train, on which we had been invited to go to Puerto Mexico, lest the general of police change his mind.

Describes His Experiences.

I do not like to give too much space to our own experiences, but I must relate them in so far as they illustrate conditions and the attitude of the Huertistas toward Americans. Twice we were arrested and once held incommunicado a short time and searched as spies for incriminating documents. Thursday morning Richard Harding Davis, Frederick Palmer and I left Vera Cruz by train for the gap in the railway where the Mexicans cut the track April 22. It is not surprising that we were stopped. It is surprising that two of us got to Mexico City and back again with so little delay.

Palmer has the appearance of an American man of letters. Davis says the farther we advanced into the interior the more I looked like a shaven Uncle Sam. Davis himself looked to me like a mixture of John Drew and Theodore Roosevelt shaken well before using. He and I, anyway, seemed selected for defeat. Adam Weimar, a German-American employed by the Banco Nacional, who started with us from Vera Cruz, did what he could to help us. Davis had letters from the Brazilian consul to his minister in Mexico City. I had a personal letter from the French consul introducing Davis and me to General Maas, while in addition I had a certificate which showed that I represented a great English newspaper. Our credentials, like Mercutio's, were not much, but enough, but Palmer had only a visiting card.

Men Placed Under Arrest.

From the gap we rode by rail to Paso del Macho, where we stopped for luncheon.

It was very hot and the platform was packed with waiting Mexican refugees from Vera Cruz. Suddenly I saw Davis going through the crowd with a shabby little officer at his elbow. As I started to his rescue another officer, still shabbier, tapped me on the arm and invited me to follow him. I did. As the guard closed around us we turned to welcome Palmer's solemn accession to our ranks.

Off to the jail we marched, little sandaled soldiers shuffling along on either side. They drove a crowd of men and women out of the jail court into the jail and asked us for our papers. They read the papers and then offered a chair first to Palmer, not to sit on, but to facilitate the removal of his boots to see if his socks contained dispatches. They searched us, but I politely refused to give up my letter to General Maas, which saved us. I unlimbered my Spanish. They put us in a nice cell and sent for another officer.

Sentinel Loads His Gun.

Meanwhile a lieutenant, who looked like a doorkeeper in a "movie" show, put a sentinel over each of us and occasionally loaded his gun. Davis said something by way of condolence. "Silencio!" said the sentinel.

So we sat, cross, hot and num—above all, mum. Presently came a lieutenant who could speak French. I unlimbered that language, too, and we were sent without a guard. General Maas was very civil. He did not ask Davis or me about our nationality, but Palmer's visiting card would not do. He had to go back to Vera Cruz.

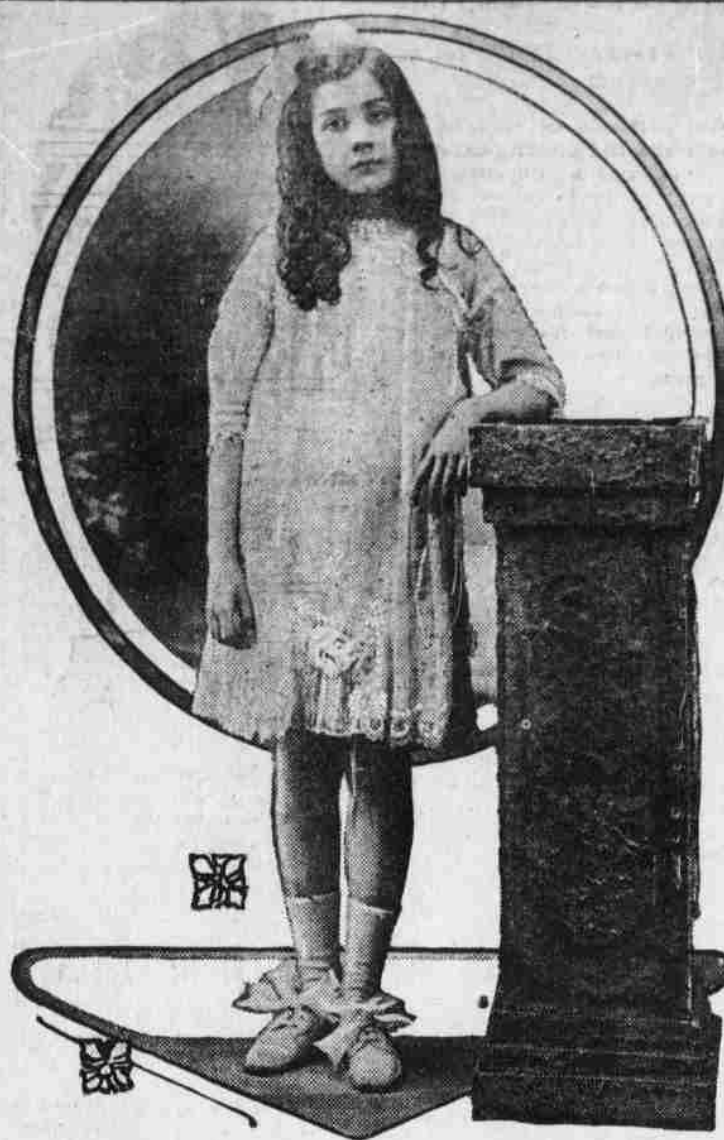
We had no more adventures. A drunken brackman said he was death on Americans, but if we were English we could give him a few centavos for beer. At Orizaba we spent a comfortable night in a hotel kept by a Frenchman. Friday we left for Mexico City. It was not until we were leaving the railroad station for our hotel in the capital that anything befell us. Then a young man with the manners of a hotel runner stopped us. We discovered that he was a detective.

Accompanied by this man and a half a dozen of his colleagues, we went to the office of the inspector of police. With us went E. T. Oakley, resident correspondent of the London Times, to see us through. There we found Walter Whiffen, who had been confined for twenty-four hours without a bed, linen or sanitary facilities. Sutton also was there, Oakley vouched for us and presently we were taken to the Brazilian legation and after an hour's parley were released upon our agreement to leave the city within twenty-four hours and to send no news by mail or cable during our stay there.

"Weant Sarcastic."

A lady in a town lying under the Rockies was much distressed at hearing a small clote in her town refer to themselves as the "smart set." She appealed to an ex-United States senator and asked him what he understood by the term "the smart set." He replied: "I think I can give you an inkling. In the eastern part of Colorado and in the western part of Nebraska there is a large tract of land known as the 'rain belt.' It never rains there."

Child's Dress of Embroidered Batiste



ONE of the prettiest models for little girls' dresses is from the establishment of Berthe Raulin, and its daintiness and simplicity speak well for the Paris modiste. Fine mull or batiste is the fabric upon which there is a moderate amount of hand embroidery in eyelet work and flat daisies.

The scant fullness of the dress is provided by single box plaits at the front and back. There are two at each side of the middle panel. The lower edge of the skirt is cut in squares at the front, back and each side. A flounce of imitation, all-over val lace, edged with a narrow edging of the same kind of lace, is set in at each of the square openings. This gives plenty of freedom at the lower edge of the skirt.

There is a border outlining the lower edge of the batiste, of a strong lace in Irish crochet pattern. The embroidered daisies are applied to both the batiste and this lace.

There is a yoke and collar in one

of embroidered batiste edged with the same lace. The sleeves are of the all-over val edged with the same lace as that in the bottom of the skirt and on the collar. This collar extends over the top of the sleeves like a wide epaulette.

A soft ribbon, about five inches wide, is drawn through the skirt where the flounces of val lace are set in. A short space is left at the side of each flounce. The ribbon is threaded through this. It extends under the skirt, from one space or slash to the next, and is tied in a knot at the front and in a flat bow at the back.

Small flat crochet buttons, barrel shaped, are placed in four groups of three each up the front and back. The dress fastens with flat pearl buttons under a fly at the back.

It would not be easy to find a more beautiful or delightfully childish model than this, which is in the best mode of the French designs of children's dresses.

Summer Wrap of Taffeta



NOTHING could set forth more clearly the fashion in figures than the coat of taffeta which is shown in the picture. The flat chest, low bust, absence of waist line, and loose hang of the coat are all items to reckon with in choosing apparel to meet the latest whims of those who create styles. And the approval of those who make styles into fashions, by adopting and wearing them, is already set upon these features.

The figure, as managed in the new modes, is straight up and down, or appears so, with curves only those provided by drapery and placed to suit the modiste. But in spite of this arbitrary draping and loose adjustment to the figure there is no lack of elegance in the fashionable apparel of today. One may embody these style features in a garment like the little coat shown here in a manner that is attractive and becoming to the wearer.

Light taffeta coats promise well for mid-summer wear. The airiest of

gowns is not crushed by them, they are easily slipped on or off, and they are cool and crisp looking. Like linen they are prone to become wrinkled and must be occasionally dampened and pressed with a warm iron. It is said the most satisfactory way to dampen a taffeta garment is to hang it near an open window or door on a rainy day and allow it to pick up moisture from the air. It should be pressed under a thin clean cloth.

The three views given of the coat pictured here show clearly the outlines of the garment and may be taken as a criterion in the matter of shaping the popular summer coats of taffeta.

JULIA BOTTOMLEY.

Business Footing.

An heiress refused a conceited money seeker by asking him: "Why should I marry you? I don't love you." The man had the impudence to reply: "Oh, that's all right. I would not be at home much."

Summer Stockings.

Embroidered clocks on stockings are never more appropriate than when worn with an organdie dress or a white lingerie gown that has upon it a touch of colored ribbon. If the colored ribbon is omitted, embroidered stockings can be worn just the same, for the embroidery can be in white also.

A dainty southern girl known for her good taste in dress wore one of a blue and white figured organdie with a six- and eight-pointed star pattern. She had a pair of white stockings with blue and white embroidered stars. They

sprays of the flowers ran up each side of the stockings and peeped out when my little lady's skirts were raised ever so slightly.

Daily Thought.

Be calm in arguing, for fierceness makes error a fault and truth discourtesy.—Herbert.

Wanted Information.

"I had my fortune told last night. 'Did you? How much is it?'"—Detroit Free Press.

Are Your Kidneys Weak?

You may have kidney trouble and not know it. The only signs may be occasional twinges in the small of the back, constant lassitude, dizziness or some annoying irregularity of the kidney action. But no sign of kidney trouble can be safely ignored. Kidney disease moves rapidly. It leads to dropsy, gravel, Bright's disease, rheumatism. If you suspect that your kidneys are sluggish, use Doan's Kidney Pills, which have relieved thousands.

A Missouri Case.

"Every Picture Tells a Story." Miss Ethel Bentley, 545 W. Washington St., Marshall, Mo., says: "Three doctors treated me for kidney trouble, but with no success. The terrible pains and aches were nerve-racking and I was unable to do my work. At times I couldn't stop. Doan's Kidney Pills soon relieved me. Six boxes cured me and I give them the credit for saving my life."

Get Doan's at Any Store, or a Box DOAN'S KIDNEY PILLS, FOSTER-MILBURN CO., BUFFALO, N. Y.

PARKER'S HAIR BALM. A toilet preparation of merit. Helps to eradicate dandruff. For restoring color and beauty to Gray or Faded Hair. 50c. and \$1.00 at Druggists.

JUST SAVED THE SITUATION

British Royalty's Narrow Escape From What Might Be Called "Simply Awful" Position.

When truth gets a fair inning she rarely fails to be much funnier than fiction. Strange to say, old England, where truth is supposed to be always dimly sober, now and then makes quite a merry record. A rector of the Church of England, in a remote parish in Wiltshire, recently discovered among his parishioners a fine old figure of a woman, age one hundred and four, the widow of an innkeeper. This ancient dame has eight sons living, six of whom have served in either the army or the navy. The rector wrote informing King George of these things, and the king ordered a warm congratulatory telegram to be sent to her.

Just as the telegram was sent off, the rector having received additional testimony concerning the "old un," wrote again, explaining that she had been twice divorced, and had not gone through the marriage ceremony at all with the man of her latest household. Another wire was promptly set at work at the king's command, ordering the postmaster at the other end to stop delivery of the royal congratulations, and that functionary had barely time to grab the coat-tails of the messenger with the bicycle as he was about to make delivery.

Efficacious, But—

Ex-Speaker Alfred E. Smith, who defeated the Goethals police bill at Albany, N. Y., said at a dinner:

"There are better ways to improve the force than this Goethals bill. They're not such showy, not such attractive ways, but they're better."

"And the mayor, turning from them with repugnance, is like the girl who said:

"How can I learn to stand and sit in the new round-shouldered, bent-over, slouching attitude, ma?"

"The girl's mother stopped her work, and, leaning on her broom, replied:

"A good way, perhaps, would be to tire yourself a bit each morning by helping with the sweeping and dusting and dish-washing."

Pleasant for Preacher.

A mother sent her little daughter down to open the door and entertain the minister, Mr. Blank, while she finished dressing. When she appeared the little kitten ran in ahead of her, and the tiny maiden jumped up and down and screamed at the top of her voice: "Oh, kitty, kitty, go out quick." The mother was horrified and said: "Daughter, what makes you act so?" "Well, mother, dad said last night that Mr. Blank's sermons were enough to make a cat sick, and I don't want him in here."

LIVING ADVERTISEMENT

Glow of Health Speaks for Postum.

It requires no scientific training to discover whether coffee disagrees or not.

Simply stop it for a time and use Postum in place of it, then note the beneficial effects. The truth will appear.

"Six years ago I was in a very bad condition," writes a Tenn. lady. "I suffered from indigestion, nervousness and insomnia."

"It was then an inveterate coffee drinker, but it was long before I could be persuaded that it was coffee that hurt me. Finally I decided to leave it off a few days and find out the truth. The first morning I left off coffee I had a raging headache, so I decided I must have something to take the place of coffee." (The headache was caused by the reaction of the coffee drug—caffine.)

"Having heard of Postum through a friend who used it, I bought a package and tried it. I did not like it at first but after I learned how to make it right, according to directions on pkg., I would not change back to coffee for anything."

"When I began to use Postum I weighed only 117 lbs. Now I weigh 170 and as I have not taken any tonic in that time I can only attribute my present good health to the use of Postum in place of coffee."

"My husband says I am a living advertisement for Postum."

Name given by the Postum Co., Battle Creek, Mich.

Postum now comes in two forms: Regular Postum—must be well boiled, 15c and 25c packages. Instant Postum—is a soluble powder. A teaspoonful dissolves quickly in a cup of hot water and, with cream and sugar, makes a delicious beverage instantly, 20c and 50c tin.

The cost per cup of both kinds is about the same.

"There's a Reason" for Postum.—sold by Grocers.